44. (new) The tyre of claim 38, wherein a width of the second portion is greater than or equal to 50% of an overall width of the tread band.

45. (new) The tyre of claim 38, wherein the white filler is a silica-based reinforcing filler.

46. (new) The tyre of claim 39, wherein the second reinforcing filler is substantially free of carbon black.

47. (new) The tyre of claim 46, wherein the second reinforcing filler further comprises colored pigments.

#### **REMARKS**

Applicants submit this Amendment, accompanied by an Appendix to Amendment, copies of a Declaration filed June 23, 2000, and a Supplemental Declaration filed December 11, 2000, a Petition Under 37 C.F.R. § 1.84(b)(2), the Figure 6 color thermograph/photograph (three copies, plus one black and white copy), a Terminal Disclaimer, and a Petition for Extension of Time, in response to the Office Action mailed September 25, 2002.

In this Amendment, Applicants amend the specification. Applicants also cancel, without prejudice or disclaimer, claim 1. Additionally, Applicants amend claims 23-26 and 30-34 and add new claims 38-47 to more appropriately define the claimed invention and improve clarity.

FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLP

The originally-filed specification, claims, abstract, and drawings fully support the amendments to the specification and claims 23-26 and 30-34, as well as the addition of new claims 38-47. No new matter was introduced.

Before entry of this Amendment, claims 1 and 22-37 were pending in this application.

After entry of this Amendment, claims 22-47 are pending in this application.

In the Office Action, the Examiner objected to the disclosure; indicated that the drawings were considered to be informal; alleged that the declaration was defective; renumbered claim 26 as claim 1 and claims 47-62 as claims 22-37; rejected claims 24-26 and 29-37 under 35 U.S.C. § 112, ¶ 1; rejected claims 1 and 22-37 under 35 U.S.C. § 112, ¶ 2; alleged that claim [22] was a substantial duplicate of claim 1; alleged that claims 30-37 were a substantial duplicate of claims [22]-29; objected to claims 23 and 31 under 37 C.F.R. § 1.75(c); rejected claims 1 and 22-37 under 35 U.S.C. § 103(a) as being unpatentable over European Patent Application

No. 0,658,452 ("Boiocchi I") in view of European Patent Application No. 0,732,229

("Crawford") and European Patent Application No. 0,627,332 ("Boiocchi II") and, optionally, European Patent Application No. 0,105,822 ("Becker"); and provisionally rejected claims 1 and 22-37 under the judicially-created doctrine of obviousness-type double patenting.

Applicants respectfully traverse the Examiner's rejections.

#### The Disclosure

Applicants strongly disagree with the Examiner's characterization of the present application as a continuation-in-part of parent U.S. patent application Serial No. 09/472,019, filed December 27, 1999 ("the parent application").

FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLP

In the parent application, this Examiner objected to the disclosure describing Fig. 6 as a thermograph showing tyre treads in color because the as-filed Fig. 6 was a black and white copy of the color thermograph, showing the tyre treads in grey-scale. However, in an Advisory Action dated January 10, 2001, the Examiner withdrew this objection "[i]n view of the evidence of record as a whole including (i) the original specification, (ii) the original figures, (iii) the declaration by Paolo Guella filed 6-23-00 and [(iv)] the newly submitted declaration by Paolo Guella filed 12-11-00..."

Additionally, in the parent application, the U.S. Patent and Trademark Office ("USPTO") granted a Petition Under 37 C.F.R. § 1.84(b)(2) to replace as-filed Fig. 6 (the black and white copy of the color thermograph) with a new Fig. 6 (the color thermograph itself). Copies of a related Declaration filed June 23, 2000, and a Supplemental Declaration filed December 11, 2000, are provided for the Examiner's convenience.

Thus, in the parent application, the color thermograph Fig. 6 was not new matter.

In the present application, as-filed Fig. 6 is the same color thermograph Fig. 6. As in the case of the parent application, the color thermograph Fig. 6 is <u>not new matter</u>. Thus, the present application is properly characterized as a <u>continuation</u> of the parent application, and not a continuation-in-part.

Therefore, Applicants respectfully request that the Examiner withdraw the objection to the disclosure. Further, Applicants request that the Examiner specifically acknowledge Applicants' claim for domestic priority under 35 U.S.C. § 120 in the next paper mailed from the USPTO.

FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLL

#### The Drawings

Applicants submit a Petition Under 37 C.F.R. § 1.84(b)(2) ("Petition") with this Amendment. Applicants submit that the Petition obviates the Examiner's concern regarding the formality of the drawings.

Applicants respectfully point out that, in the as-filed specification, the first paragraph after the section heading BRIEF DESCRIPTION OF THE DRAWINGS reads "The file of this patent contains at least one drawing executed in color. Copies of this patent with color drawing(s) will be provided by the Patent and Trademark Office upon request and payment of the necessary fee."

### The Declaration

Applicants note that 37 C.F.R. § 1.63(d) states, <u>inter alia</u>, that "a newly executed oath or declaration is not required . . . in a continuation or divisional application, provided that . . . the specification and drawings filed in the continuation or divisional application contain <u>no</u> matter that would have been <u>new matter</u> in the prior application." (Emphasis added).

As discussed above under the heading "The Disclosure," as-filed Fig. 6 in the present application is not new matter.

Similarly, the Preliminary Remarks document filed with the present application on March 12, 2001, states, <u>inter alia</u>, "The specification filed herewith is substantially similar to the Substitute Specification in parent U.S. Patent Application No. 09/472,019, filed December 27, 1999, and whose entry was approved by [this] Examiner in an Office Action dated March 23, 2000."

FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLP

Therefore, Applicants respectfully submit that the Declaration and Power of Attorney is not defective.

## 35 U.S.C. § 112, ¶ 1, Rejections

Applicants submit that the amendment of claim 30 to recite "wherein a difference between an amount of white filler in the first reinforcing filler and an amount of white filler in the second reinforcing filler achieves a tyre operating temperature lower than a reference temperature" obviates the rejection of claim 30 under 35 U.S.C. § 112, ¶ 1.

As correctly pointed out by the Examiner, because the first reinforcing filler includes at least 40%-by-weight carbon black, the first reinforcing filler must be less than or equal to 60%-by-weight white filler.

Applicants note that the Table on page 22 of the as-filed specification discloses a black blend comprising about 31% white filler.

Applicant submits that these disclosures provide support for claims 24-26 and 32-34, as amended.

Each independent claim includes the recitation "wherein the tread band comprises at least first and second circumferential <u>axially-contiguous</u> portions." (Emphasis added). Applicants submit that the recitation "not radially-contiguous portions" is not inconsistent with the recitation "axially-contiguous portions."

In the present application, for example, Fig. 1 shows axially-contiguous portions A and B. However, these portions A and B are <u>not radially-contiguous</u> portions. In sharp contrast, Fig. 2 of Becker, for example, shows radially-contiguous portions 32, 34, 36, 38, 40, 42, and 44 in the form of radial layers.

FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLP

Additionally, Fig. 1 in the present application, for example, demonstrates that Applicants possessed the subject matter of portions A and B, where portions A and B are axially-contiguous portions, but not radially-contiguous portions.

### 35 U.S.C. § 112, ¶ 2, Rejections

Applicants cancel, without prejudice or disclaimer, claim 1.

Applicants submit that claim 30, as amended, and claim 22, although similar, do not have identical scope.

Applicants also submit that the amendment of claims 23 and 31 obviate the Examiner's rejections under 35 U.S.C. § 112, ¶ 2.

Additionally, Applicants submit that the independent-claim recitation "wherein the first reinforcing filler includes at least 40%-by-weight carbon black" prevents the dependent-claim recitation "wherein the first reinforcing filler includes at least about 31%-by-weight white filler" from reading on percentages of white filler above 60%-by-weight. However, although the recitation "wherein the first reinforcing filler includes at least about 31%-by-weight white filler" (emphasis added) is effectively similar to the recitation "wherein the first reinforcing filler includes between 31%-by-weight white filler and 60%-by-weight white filler," claims 25 and 26 do not have identical scope. Likewise, claims 33 and 34 do not have identical scope.

#### 37 C.F.R. § 1.75

Regarding the Examiner's concerns related to 37 C.F.R. § 1.75, Applicants note that MPEP 706.03(k) states "a mere difference in scope between claims has been held to be enough."

In the present application, as discussed above, Applicants submit that claims 22 and 30 do not have identical scope. Further, Applicants submit that claims 22 and 30 are not duplicates,

FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLP

nor are they so close in content that they both cover the same thing despite a slight difference in wording. As a result, claim 30 is not a substantial duplicate of claim 22. And, dependent claims 31-37 are not substantial duplicates of dependent claims 23-29.

Applicants also submit that the amendment of claims 23 and 31 obviates the Examiner's objections under 37 C.F.R. § 1.75(c).

#### Cited References

#### Boiocchi I

Boiocchi I discloses an antistatic tyre comprising a carcass, beads, at least one belt layer, and a tread. (Boiocchi I, column 1, lines 1-11, and Figs. 1 and 2.) The tread band has a low carbon-black content and high silicon (or other non-conductive filler) content. (Id., column 3, lines 33-36.) The tyre further comprises at least one conductive insert containing carbon-black reinforcing fillers extending through the whole tread-band thickness. (Id., column 3, lines 38-53; column 4, lines 32-34; and Figs. 1 and 2.) The at least one conductive insert increases the electric conductivity between the tyre and the ground. (Id., column 3, lines 53-58.)

Boiocchi I does not disclose including white filler in the conductive insert containing carbon-black reinforcing fillers. Additionally, the tyre design of Boiocchi I does not contemplate an outer top cap layer as its at least one conductive insert. Instead, the at least one conductive insert of Boiocchi I passes through the whole tread band thickness such that it performs the function of a conductive connection between the ground and one of the belt layers or the carcass ply, or a sidewall, or another sufficiently conductive part of the tyre. (Id., column 3, lines 33-46; and Figs. 1 and 2.)

FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLP

Further, the development of tyres whose tread band is made of a blend in which carbon black is mostly or completely replaced by, for example, silicon-based reinforcing fillers, provided tyres with remarkably reduced rolling resistance and better hysteretic features. (Id., column 2, lines 40-56.) But, these same tyres caused an undesirable increase in the electrical resistance of the tyres and, thus, an undesirable increase in electrostatic charge build-up on the vehicles on which these tyres are mounted. (Id., column 2, line 57 - column 3, line 32.)

Boiocchi I discloses an invention that solves this specific problem, that of reducing the electrical resistance of these types of tyres and, thus, reducing electrostatic build-up on the vehicles on which these tyres are mounted.

#### Crawford

Crawford discloses a tyre comprising a carcass, a tread, and an outer tread cap.

(Crawford, page 2, lines 5-8.) The carcass is carbon-black reinforced. (Id., page 2, lines 5-8.)

The tread contains quantitative silica reinforcement and a minimal amount of carbon black. (Id.)

As correctly pointed out by the Examiner, the outer tread cap is disclosed to be "primarily carbon black reinforced rubber composition." (Id., page 6, lines 11-15.)

Thus, a proper understanding of Crawford requires determining what the patentee means by the term "carbon black reinforced." Fortunately, Crawford carefully defines the term "carbon black' reinforced" as "the rubber components of the <u>tire carcass rubber</u> which are carbon black reinforced, contain a quantitative amount of carbon black reinforcement, normally at least 25 phr, and a <u>minimal amount</u>, if any, of silica and the weight ratio of carbon black to silica is at least 5/1." (<u>Id.</u>, page 2, line 58 - page 3, line 2.) (Emphasis added.) Thus, the

FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLP

patentee's own words exclude the outer tread cap, the key element of Crawford, from this definition.

Additionally, Applicants note that the defined weight ratio of carbon black to silica of at least 5/1 in Crawford means that the resulting reinforcing filler would have <u>at most 16.67%</u>-byweight silica.

However, Crawford does disclose <u>separately</u> that the outer top cap layer is composed of rubber containing a quantitative amount of carbon black and minimal, if any, silica. (<u>Id.</u>, page 2, lines 5-8 and 9-16.) This description specifies <u>no value</u> for the minimal, if any, silica. Further, other descriptions of the outer tread cap do not mention silica, although they do describe the carbon black in some detail. (<u>See, e.g., id.</u>, page 4, lines 8-12 and 43-47; page 4, line 36 - page 5, line 1; page 5, lines 11-20; and page 7, lines 28-30.)

## <u>Becker</u>

Becker discloses a tyre comprising a carcass and a tread, "said tread having at least an inner layer having good heat resistant properties; said tread having at least an outer layer having good wear, cut and tear resistant properties; and wherein said tread has from 3 to 10 layers."

(Becker, page 2, lines 17-21.) Each succeeding layer is located radially outward of the layer preceding it. (Id., page 3, lines 16-18, and Figs. 1 and 2.) Because of this multiple-layered construction, any individual layer with a significantly reduced carbon black content could promote rather than reduce electrostatic charge build-up on vehicles.

## Boiocchi II

Boiocchi II discloses a tyre for motor vehicles provided with a tread for producing a low rolling noise due to its tread pattern. (Boiocchi II, column 1, lines 1-9.)

FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLP

## 35 U.S.C. § 103(a) Rejections—Independent Claims

Applicants cancel, without prejudice or disclaimer, claim 1.

To establish a <u>prima facie</u> case of obviousness under 35 U.S.C. § 103(a) using multiple references, each of three requirements must be met. First, the references, when combined, must teach or suggest all the claim limitations. (M.P.E.P. 2143.03 (8<sup>th</sup> ed. 2001).) Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references in a manner resulting in the claimed invention. (M.P.E.P. 2143.01 (8<sup>th</sup> ed. 2001).) Third, there must be a reasonable expectation of success that the proposed combination will work for the intended purpose. (M.P.E.P. 2143.02 (8<sup>th</sup> ed. 2001).) Moreover, the second and third requirements "must both be found in the prior art, not in applicant's disclosure." (M.P.E.P. 2143 (8<sup>th</sup> ed. 2001).)

Applicants submit that no proper combination of the cited references teaches or suggests all the claim limitations of independent claim 22, including "wherein the tread band comprises at least first and second circumferential axially-contiguous portions, wherein the first portion is formed of a first composition comprising a first reinforcing filler including white filler and carbon black, wherein the first reinforcing filler includes at least 40%-by-weight carbon black, wherein the second portion is formed of a second composition comprising a second reinforcing filler including white filler, wherein the second reinforcing filler includes at least 20%-by-weight white filler, wherein the first composition is different from the second composition, and wherein a difference of compositions between the at least first and second portions achieves a tyre operating temperature lower than a reference temperature."

FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLP

Additionally, Applicants submit that no proper combination of the cited references teaches or suggests all the claim limitations of independent claim 30, including "wherein the tread band comprises at least first and second circumferential axially-contiguous portions, wherein the first portion is formed of a first composition comprising a first reinforcing filler including white filler and carbon black, wherein the first reinforcing filler includes at least 40%-by-weight carbon black, wherein the second portion is formed of a second composition comprising a second reinforcing filler including white filler, wherein the second reinforcing filler includes at least 20%-by-weight white filler, wherein the first composition is different from the second composition, and wherein a difference between an amount of white filler in the first reinforcing filler and an amount of white filler in the second reinforcing filler achieves a tyre operating temperature lower than a reference temperature."

Further, Applicants submit that no proper combination of the cited references teaches or suggests all the claim limitations of independent claim 38, including "wherein the tread band comprises at least first and second circumferential axially-contiguous portions, wherein the first portion is formed of a first composition comprising a first reinforcing filler including at least 40%-by-weight carbon black, wherein the second portion is formed of a second composition comprising a second reinforcing filler including at least 20%-by-weight white filler, wherein the first composition is different from the second composition, and wherein a difference of hysteresis values at 70 °C of the first and second compositions is at least equal to 10% of a higher value of the two hysteresis values." Thus, Applicants submit that independent claim 38 is patentable over the cited references including Becker, Boiocchi I, Boiocchi II, Crawford, and the other art of record.

FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LLP

Therefore, Applicants submit that independent claims 22, 30, and 38 are patentable over the cited references including Becker, Boiocchi I, Boiocchi II, Crawford, and the other art of record.

## 35 U.S.C. § 103(a) Rejections—Dependent Claims

Applicants submit that dependent claims 23-29, 31-37, and 39-47 are patentable over the cited references, including Becker, Boiocchi I, Boiocchi II, Crawford, and the other art of record. This is true whether such art is considered alone or in any proper combination, at least due to the dependency of claims 23-29 from independent claim 22; the dependency of claims 31-37 from independent claim 30; and the dependency of claims 39-47 from independent claim 38 or claims dependent from independent claim 38.

## Terminal Disclaimer

Applicants submit a Terminal Disclaimer to obviate the Examiner's provisional rejections under the judicially-created doctrine of obviousness-type double patenting.

#### Claim Scope

In discussing the specification, claims, abstract, and drawings in this Amendment, it is to be understood that Applicants are in no way intending to limit the scope of the claims to any exemplary embodiments described in the specification or abstract and/or shown in the drawings. Rather, Applicants believe that Applicants are entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

FINNEGAN HENDERSON FARABOW GARRETT & DUNNERLL

# **Summary**

In view of the foregoing amendments and remarks, Applicants respectfully request the reconsideration and reexamination of this Application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Dated: March 25, 2003

Lawrence F. Galvin Reg. No. 44,694

FINNEGAN HENDERSON FARABOW GARRETT & DUNNER LP